

WHAT IS CLAIMED IS:

1. A camshaft mounting structure for a cylinder head, the structure comprising:
 - a first journal part which is placed at the frontal cylinder head of an engine, is designed to support a camshaft, and also accommodates a bolt coupling hole for securing said cylinder head and a cylinder block, wherein said cylinder head is installed with a plurality of oil holes communicating with a plurality of oil passages for connecting with an actuator of the variable valve timing apparatus;
 - a metal bearing which is mounted on said semi-circular shaped first journal part with a length identical to the maximum length of said first journal part in relation to the axial direction of said camshaft is formed with a plurality of connecting holes communicating with said plurality of oil holes; and
 - a plurality of oil grooves formed at said camshaft along the circumferential direction for respectively communicating with said plurality of connecting holes.
- 15 2. The structure as defined in claim 1, wherein said first journal part is formed with a fixing groove concavely depressed from a surface thereof at a place inclined to one side from the center of the overall axial length of said first journal part, and said metal bearing is formed with a fixing protruder coupled with said fixing groove for indicating the installation direction and securing the installation state of said metal bearing.
- 20 3. The structure as defined in claim 2, wherein said fixing groove is formed at the border of the upper end of said first journal part and the upper surface of said cylinder head.

4. The structure as defined in claim 1, wherein said first journal part partially accommodates said bolt coupling hole by overlapping with an edge of the inner side of said cylinder head of said first journal part.

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5. The structure as defined in claim 4, wherein a part of said plurality of oil holes formed at said first journal part are formed in a maximum width in a circumferential direction of said first journal part cut out for said bolt coupling hole.

10 6. The structure as defined in claim 1, wherein the widths of said oil grooves are smaller than each diameter of said connecting holes, and the diameters of said oil holes and said connecting holes are preferably the same in size.

7. The structure as defined in claim 6, wherein the diameters of said oil holes and 15 said connecting holes are respectively greater than or equal to 6mm, the widths of said oil grooves are 3-5mm, and each oil grooves are distantly mounted at intervals equal to or greater than 7mm.

8. The structure as defined in claim 1, wherein said oil grooves are respectively 20 formed with oil holes mutually communicating with connecting holes of said metal bearing for supplying or returning oil to said actuator of the variable valve timing apparatus.